



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

March 4, 2013

Superintendent Philip A. Francis, Jr.
Blue Ridge Parkway
199 Hemphill Knob Road
Asheville, NC 28803

**RE: Final General Management Plan /Environmental Impact Statement Blue Ridge
Parkway Virginia and North Carolina
CEQ Number: 20130008**

Dear Mr. Francis:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the subject Final General Management Plan /Environmental Impact Statement Blue Ridge Parkway Virginia and North Carolina.

General management plans are intended to be long-term documents that establish and articulate a management philosophy and framework for decision making and problem solving in units of the national park system. General management plans usually provide guidance during a 15- to 20-year period.

This Final General Management Plan /Environmental Impact Statement presents three alternatives for the future management of the Blue Ridge Parkway. The alternatives, which are based on the parkway's purpose, significance, and special mandates, present different ways to manage resources and visitor use and improve facilities and infrastructure. The three alternatives are the no-action alternative (continue current management), alternative B, and alternative C. Alternative B has been identified as the National Park Service's preferred alternative.

**ALTERNATIVE A: THE NO-ACTION ALTERNATIVE (CONTINUE CURRENT
MANAGEMENT)**

The no-action alternative consists of a continuation of existing management and trends at the parkway and provides a baseline for comparison in evaluating the changes and impacts of the other alternatives. The National Park Service would continue to manage the parkway as it is currently being managed, but there is not a comprehensive parkway-wide resource and visitor use management direction for setting priorities. Resource and visitor use issues and conflicts

would continue to be resolved on a case-by-case basis without the guidance of an agreed upon parkway-wide management strategy.

ALTERNATIVE B (NATIONAL PARK SERVICE PREFERRED)

Under alternative B, the parkway would be actively managed as a traditional, self contained, scenic recreational driving experience and designed landscape. To support that experience, many of the parkway's recreation areas would provide enhanced opportunities for dispersed outdoor recreation activities. This alternative would provide a comprehensive parkway-wide approach to resource and visitor use management. Specific management zones detailing acceptable resource conditions, visitor experience and use levels, and appropriate activities and development would be applied to parkway lands consistent with this concept. This alternative would also seek to enhance resource protection, regional natural resource connectivity, and build stronger connections with adjacent communities.

ALTERNATIVE C

Under alternative C, parkway management would be more integrated with the larger region's resources and economy. More emphasis would be placed on reaching out to communities and linking to regional natural, recreational, and cultural heritage resources and experiences. The parkway would continue to be managed to retain the fundamental character of the traditional designed landscape and scenic driving experience. However, a variety of more modern recreational and visitor service amenities would be provided, primarily concentrated in visitor services areas. As a result, portions of some recreation areas would be redesigned.

EPA's COMMENTS

Parkway Biodiversity:

The 469-mile Blue Ridge Parkway has about 400 road crossings, each one a pathway for exotics. The parkway is home to nine federally listed species and 14 species of federal concern. Its flora includes more than 2,000 species of vascular plants, 400 mosses and more than 100 kinds of trees. It supports more than 2,000 types of fungi, as well as 67 mammal, 93 fish, 43 amphibian, 40 reptile and 227 bird species. Along its 470-mile length, it intersects 15 watersheds. It contains 600 miles of streams, more than 150 wetlands and bogs and more than 300 seeps. Sixteen of its peaks rise above 5,000 feet, and it bisects six of 11 major sites supporting southern Appalachian spruce-fir forests. Sometimes-abrupt elevation changes occur regularly as the parkway climbs toward summits winds through gaps and descends to cross the James, Roanoke, Linville and French Broad rivers. Overall, its elevation ranges from 600 to 6,000 feet.

Threats to Blue Ridge Parkway biodiversity:

1. Exotic plants and forest pests. The parkway cannot handle all threats posed by exotic plants (among the worst problems: oriental bittersweet, microstegium, Chinese yam, coltsfoot, Japanese spirea, honeysuckle and wisteria, tree of heaven, princess tree, garlic mustard and kudzu), so it

developed an exotic-plant management plan five or six years ago that established high-elevation sites and wetlands as top priority areas for fighting invasives. Forest pests the parkway is fighting include the hemlock woolly adelgid and gypsy moth.

Controlling invasive species is accomplished using a variety of methods: the use of herbicides, mechanical controls, physical control, such as fire, biological controls by the intentional introduction of melaleuca-damaging beetles and public awareness. Herbicides, however, are generally non-selective in inhibiting plant growth. Control methods most appropriate for widely differing park habitats need to be determined by NPS scientific staff, who must balance the protection of native plants/wildlife with exotic plant control objectives.

Concerns have been expressed over herbicides having unforeseen consequences adversely impacting park ecosystems and ultimately human health. These concerns include herbicide movement in soils, persistence in ground/surface waters, long-term ecological effects on non-target species such as fish, birds, mammals, and target plant species becoming resistant to herbicides.

EPA supports the use of registered herbicides if they are properly applied by licensed applicators, because there does not appear to be any cost-effective alternatives for controlling the spread of invasive exotic plant infestations. Infested sites are often situated in remote areas making mechanical removal impractical because of access difficulties. Keeping abreast of treatment frequencies, vulnerabilities of pest species, protection for threatened and endangered species residing at hundreds of differing locales, clearly require sophisticated management tools. Integrated management techniques including herbicides, mechanical removal, fire, biological controls, need to be coordinated through the use of GIS-based management tools to ensure that invasive species control is achievable for the long term.

EPA encourages use of an integrated pest management approach be developed using products with a low toxicity profile in sensitive ecosystems, since studies done in labs and under controlled conditions cannot always predict the effects on particularly sensitive individuals, biota or ecosystems.

2. Trampling by visitors and poaching. Unfortunately visitors walk out on the edges of rock ledges, which is where many of our rare species occur. Trampling also occurs along trails.

3. Land development along the parkway. In some areas, adjacent landowners are bushwhacking to reach parkway trails, which provide additional corridors for exotics to migrate onto parkway lands. Development is a view shed issue, but it also has the effect of squashing whatever is rare and exotic onto parkway land.

4. Air pollution and global warming. Because it isn't listed as a Class 1 airshed under the Clean Air Act, the parkway does not have to monitor air quality, although potentially air pollution and climate change could be a major issue.

EPA encourages significant monitoring activities to ensure that the increase in hardened access areas and likely subsequent increase in recreational and educational usage of the park do

not negatively impact biodiversity, natural and cultural resources.

“In general, most motorcycle accidents occurred in the southern portions of the parkway where the roadway geometry is more varied, and most of the deer-related accidents occurred in the northern portions where the topography and land use creates more wildlife crossings. The most common area for deer related accidents is near Roanoke between milepost 104 and milepost 128. Over 70% of the accidents in this 24-mile section were deer-related (DEA 2004)”. EPA encourages consideration of large mammal wildlife passages to address this safety concern and consultation with NCWRC and USFWS regarding the design of appropriate wildlife passages.

“Utility Operations is responsible for monitoring systems for water, sewer, electric, heating and cooling. The parkway currently maintains 45 individual potable water treatment systems, 94 wastewater treatment units, and 118 HVAC systems. There are also three solar powered units, two of which support visitor services areas. Many of these systems have exceeded their maximum effective life of 15 years, therefore creating greater operational costs”. EPA encourages replacement of failing systems and further exploration of more energy efficient “green” systems.

In the spirit of collaboration and technical assistance the EPA encourages NPS to consider some sustainability concepts which could be incorporated in the management plan.

Green Building

Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from design to, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. Green building is also known as a sustainable or high performance building.

Green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation

For example, green buildings may incorporate sustainable materials in their construction (e.g., reused, recycled-content, or made from renewable resources); create healthy indoor environments with minimal pollutants (e.g., reduced product emissions); and/or feature landscaping that reduces water usage (e.g., by using native plants that survive without extra watering).

In the United States, buildings account for:

- 39 percent of total energy use

- 12 percent of the total water consumption
- 68 percent of total electricity consumption
- 38 percent of the carbon dioxide emissions

Potential benefits of green building can include:

Environmental benefits

- Enhance and protect biodiversity and ecosystems
- Improve air and water quality
- Reduce waste streams
- Conserve and restore natural resources

Economic benefits

- Reduce operating costs
- Create, expand, and shape markets for green product and services
- Improve occupant productivity
- Optimize life-cycle economic performance

Social benefits

- Enhance occupant comfort and health
- Heighten aesthetic qualities
- Minimize strain on local infrastructure

Green Parking

Green parking refers to several techniques that when applied together reduce the contribution of parking lots to total impervious cover. From a storm water perspective, green parking techniques applied in the right combination can dramatically reduce impervious cover and, consequently, reduce the amount of storm water runoff. Green parking lot techniques include: setting minimums of permanent parking spaces; minimizing the dimensions of parking lot spaces; utilizing alternative pavers in overflow parking areas; using bioretention areas to treat storm water; encouraging shared parking.

Green parking lots can dramatically reduce the creation of new impervious cover. How much is reduced depends on the combination of techniques used to achieve the greenest parking. While the pollutant removal rates of bioretention areas have not been directly measured, their capability is considered comparable to a dry swale, which removes 91 percent of total suspended solids, 67 percent of total phosphorous, 92 percent of total nitrogen, and 80-90 percent of metals (Claytor and Schueler, 1996).

North Carolina's Fort Bragg vehicle maintenance facility parking lot is an excellent example of the benefits of rethinking parking lot design (NRDC, 1999). The redesign incorporated storm water management features, such as detention basins located within grassed islands, and an onsite drainage system that exploited existing sandy soils. The redesign reduced impervious cover by 40 percent, increased parking by 20 percent, and saved 20 percent or \$1.6 million on construction costs over the original, conventional design.

Briefly three other sustainable activities which may be applicable to the Park Service's general management plan are as follows:

- **Green Detention Ponds**
- **Rain Water Harvesting**
- **Rain Gardens**

"Under alternative B, 10,139 acres (12.3%) of parkway lands would be zoned recreation in order to enhance outdoor recreational opportunities for visitors. Expanding or improving amenities and services within this zone would attract more visitors to less accessible areas of the parkway, increasing the likelihood of adverse impacts on threatened and endangered species. However, management prescriptions under the recreation zone state that any additional developments or use would be adapted as needed to protect threatened and endangered species" EPA encourages early coordination with USFWS to avoid potential future conflicts under the Endangered Species Act.

CONCLUSION

EPA appreciates the effort and planning put into this Plan FEIS. EPA would like to encourage NPS to consider the following activities throughout the life of the Plan:

To the greatest extent practicable, new roads should not be placed in riparian areas to creeks and rivers designated as Wild and Scenic.

Consideration of solar-powered or other "green energy sources".

Consultation with the USFWS on the frequency required for surveys prior to the commencement of construction activities.

Development of stringent water quality BMPs, including geo-tech fabric, coconut fiber matting, and potentially Polyacrylamide (PAM) near steep slopes to help prevent off-site soil erosion and sedimentation into creeks, rivers and other water bodies.

The USACE be contacted to assist in the Section 404 wetland jurisdictional delineations.

Initiation of direct and timely coordination with the USFWS on Federally-listed species, including detailed Section 7 analysis for each segment of the BRP for the Preferred Alternative.

Identify mitigative measures to reduce potential increased pollutant emissions(e.g., Solar powered electrical sources).

Development of options to reduce reliance on automobiles which favor other forms of recreational transportation for visitors (i.e. Bicycles).

Based on the FEIS, we agree with NPS that Alternative B, with consideration of additional Best Practices, would appear to be the best approach.

We appreciate the opportunity to review the proposed action. Please contact Ken Clark at (404) 562-8282 if you have any questions or want to discuss our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office